

# Charles County Md

*the digital county*

2008 Digital Counties Winner



Information Technology

Impact Najemoy Community Center Utilities County Administration Community  
Clark Senior Center Emergency Services Information Technology Human Services  
Economic Development Fiscal Services Project Impact Najemoy Community  
County Administration Community Services Richard R. Clark Senior Center  
Information Technology Human Services Partnership Economic Development  
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## 2009 Strategic Plan

PLAN

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## I. Why an IT Strategic Plan is important

*“What we think, know, or believe in is, in the end, of little consequence.  
The only consequence . . . is what we do” (Haines, 1995)*

Like many local governments, Charles County is faced with major challenges and opportunities. These challenges and opportunities are caused by heightened expectations from not only the County’s staff, but also constituents, citizens and the business community who need to interact and conduct business with Charles County utilizing modern automation capabilities, combined with the need to leverage and enhance limited staff resources necessary to accomplish the work. These expectations occur within an environment of rapid change and finite resources. Knowing there is these expectations makes Information Technology too important to be considered merely a support function. In fact Information Technology needs to be treated as a key component of Charles County and requires strategies showing how to create measurable value for all Departments and their staff.

To be successful, the County’s Information Technology (IT) resources must be contemporary, flexible, scalable and secure with the ability to respond to ever changing requirements. The County’s IT is built on an county wide architecture that supports a variety of needs while maintaining a supportable portfolio of application systems and tools, and operates effectively and efficiently to ensure better services, better products, shorter project life cycles, less cost and more convenience.

To enable and ensure that IT can meet these challenges, continued emphasis is placed on projects that conform to a strong and secure technical infrastructure foundation for all information technology systems, applications, and services. This strong and secure technical infrastructure foundation allows Charles County to communicate effectively internally and externally throughout the community, and allows appropriate and secure access to the County’s data and services. Emphasis is also placed on processes to ensure that IT projects are managed consistently through proper levels of oversight and tracking, and ensure that IT investments are leveraged, deliver a return on the investment, and are aligned with the Charles County Commissioner’s Annual Goals and Objectives.

This **IT Strategic Plan** sets a direction for Charles County, including the activities of Information Technology and the information technology efforts on behalf of all Charles County Departments. The plan communicates Charles County's strategic IT direction to the County Commissioners, County Administrator, and Department Heads as they make decisions related to information technology.

This **IT Strategic Plan** provides broad goals and guiding principles outlining the basic roadmap for information technology in the 21st century. It is always a “*work in progress*” and will be updated and modified each year to adjust to inevitable changes in information technology and Charles County’s environment. During the last quarter of each calendar year, this IT Strategic Plan will be completely reassessed. This process will insure that the plan remains a strategic document and a roadmap for the effective use of information technology in the future. This IT Strategic Plan supports the County’s governmental functions and will be coordinated with any other Charles County strategic plan.

The scope of this plan includes software design, development, deployment, and maintenance, software acquisition and support, telecommunications, video conferencing, GIS applications, system software, computer hardware and network infrastructure. Through successful implementation of this plan, Charles County will make the best use of information technology to meet departmental business requirements and raise County governmental services to an unprecedented level of quality at the lowest possible expense.

## II. Information Technology in Charles County

This **IT Strategic Plan** strives to apply information technology more consistently across the Charles County's Departments and agencies, seizing the opportunities to benefit from cutting edge information technology where appropriate. Charles County's IT will continue to assess information technology and make decisions regarding risk on a project by project basis. Although the Charles County's IT has proven to be one of the "*early adopters*" of efficient and effective technologies in the Tri-County area, it views as its challenge the ability to assess the needs of its community and be ready with the right information technology in the future. Realizing the strategic importance of information technology, the Commissioners and senior managers have expressed the desire to continue to be a "*cutting edge*" organization.

### Key Functions/Business Practices

IT's information collection efforts and previous surveys indicate that agreement exists across Charles County's Departments that information technology is underutilized and that with increased utilization, information technology could vastly improve the efficiency and effectiveness of departmental business processes. In particular, senior managers and employees feel strongly that interdepartmental IT processes must be enhanced to support work management requirements of the operating departments as well as needs of the central support departments responsible for those processes. The interdepartmental processes include but are not limited to:

- |  |                         |
|--|-------------------------|
| - Budgeting;                                 | - Financial Accounting; |
| - Strategic Planning;                        | - Procurement;          |
| - Payroll/Personnel Records;                 | - Personnel Tracking;   |
| - Communications/Transactions with Citizens; | - Work Flow Management; |
| - Records Management                         | - Document Imaging;     |

Many senior managers have expressed the need to emphasize and promote data sharing among departments and many other State/County agencies. Data collected and maintained by a single department or agency may be very useful to another. When data from applications in multiple departments are combined, the data then becomes extremely powerful both in helping employees to perform their job functions and in strategic planning. Senior managers and IT professionals know that putting data into common, accessible formats promotes the vision and many of the goals set forth in this plan. Emphasis on data sharing is reflected in several objectives in this document.

## Information Technology Activities

IT's current activities can be classified into the following three categories according to their usefulness in achieving this strategic plan.

### 1. Internal support activities

These activities are defined as:

- a) **Service Desk support** for standardized Desktop hardware and software, the user support on the County's Integrated Applications and in-house developed applications;
- b) **Troubleshooting support** in which a Work Request is submitted by the user for IT assistance on vendor supported applications. IT interfaces on behalf of the user with a vendor to resolve a problem or determine the workaround; and
- c) **Day-to-Day activities** that indirectly support business processes, such as nightly backups, network workload management, routine security, and new user setup and login maintenance.

### 2. Enhancement support activities

These activities are defined by a Work Request that describes a need to modify, update, or improve an existing IT application. Usually involves the correction to discovered errors, changes to the automated processing procedures do to changes in business rules, or an enhancement to the over all processing methods to improve the efficiency of the application. These activities only involve the Integrated Applications from New World Systems (NWS) and the in-house developed applications.

### 3. Frontier support activities

These activities are defined by a Work Request with a Work Flow Diagram attached, describing the manual procedures and processes, data input and output requirements, forms, reports and the inter/intra-departmental data flows and approvals. These activities involve either a new automated application or the re-engineering of an existing application. These activities will involve an evaluation process, recommendations, a pilot project, scheduling of in-house software development efforts or the purchase of a Commercial Off-The-Shelf (COTS) software.

## Information Technology Architecture

Charles County's current information technology architecture consists of a centralized computing platform (**i5/OS**) and several application, print and file servers running on NetWare, Linux, and Microsoft Network Operating Software (NOS).

The network topology includes Gigabit fiber, Wireless Microwave, Wi-Fi, and T-1 technologies. These various technology topologies together constitute the County's Institutional Network (I-Net). Charles County's IT staff manages the I-Net which connects over 100 sites and many government agencies throughout the County. As of January 2009, Charles County has more than 630 Desktop and Laptop Computers and 43 application, file, and print servers connected to the I-Net via Gigabit Ethernet. The Charles County's I-Net connects to the World Wide Web via the Maryland State Backbone Network (networkMD).

Charles County makes use of a centralized midrange computer, an **IBM System i5 model 9406-520 (i5 520)** in support of a series of integrated application packages from New World Systems, Inc. The County's IT also supports several server based Data Base applications as well as over 100 Commercial-of-the-Shelf (COTS) software packages. The County's IT also supports over 50 remote users via the Internet using a virtual private network (VPN) managed by a Cisco's Access Server.

IT continually evaluates and improves Charles County's computer architecture to increase reliability, performance, and compatibility with department requirements. Hardware (Desktop computers and peripheral devices) and software (both Desktop support and business processes) standards were developed to help maintain consistent, effective and efficient operations and ensure better Service Desk support.

In a 2007 evaluation of the IBM iSeries 820 System's performance measurements showed that New World Systems' internal users were demanding more resources each month. The length of the response time continued to grow. The wait for "batch jobs to run" lengthened. On days when departmental processing cycles collide (that is month end or quarterly, and annual) there were waits as long as an hour for batch jobs to run. Facing the challenges of today's processing environment, in which an Internet Technology year is only 3 months, IT recommended and acquired a new **IBM System i5 model 9406-520 (i5 520)** machine which is six times as fast as IT's former iSeries 820. This new IBM eServer series, **System i5 model 9406-520 (i5 520)**, renamed, has a clearly defined upgrade path. Additional processors, DASD and memory can be added at any time. Voice and Web access are capabilities built into the **IBM System i5 model 9406-520 (i5 520)**. The recently acquired operating system software, **i5/OS V5R4M0** is geared to promote these processes.



## Information Technology Organization, Responsibilities

The Charles County's current information technology organization is a combination of professional information technologists. As of FY07, Information Technology has 22 full-time technical positions and is divided into three sub-divisions: Operations; Applications; and Network. These areas of responsibility include any information technology related hardware and software acquisition, implementation, operation, maintenance, telecommunications and support.

### Operations

**Operations** with a staff level of two, has responsible for the County's centralized computing platform, an **IBM System i5 model 9406-520 (i5 520)**, and the administration of the countywide telecommunications, which encompasses Analog and VoIP telephony systems (desktop phones, PBXs and voicemail), the Cell phones, Data Air cards, Smart phones, and the County's telephone provider contracts.

Using IBM's Client Access software, **Operations** shares responsibility with **Network**, of enabling the users on the I-Net to access the **IBM System i5 model 9406-520 (i5 520)**. **Operations'** area of responsibility include hardware and system maintenance for the an **IBM System i5 model 9406-520 (i5 520)**, all Program Temporary Fixes (PTFs), upgrades and system enhancements, technical support to the IT staff and users, backup and continuity planning, disaster recovery, security, and the day to day operation and performance of the **IBM System i5 model 9406-520 (i5 520)** system.

The **IBM System i5 model 9406-520 (i5 520)** is the centralized IBM midrange processor for the Logos™ Integrated Applications from New World Systems, Inc. This Integrated Application software system contains many of the County's critical applications including Taxes, Financials including general ledger, budgeting, payables, receivables and procurement, Utility billing, Human Resource including payroll, and Permits and Inspections.

**Operations** has the added responsibility of maintaining the Charles County's IT contingency and disaster recovery plan. This involves coordinating with each department and other entities to ensure the minimum disruption to County services in the event of the lost of use of the **IBM System i5 model 9406-520 (i5 520)** computer resources. The **Operations'** Manager serves on the Emergency Service's LEPC.

After the CIO's white paper on the Transition of Telecommunications from Public Facilities to Information Technology in 2003, **Operations** now handles all analog and VoIP telephony including voice mail and long distance handling countywide.

### Applications

**Applications** with a staff level of eight, has responsibility for the support of the Logos™ Integrated Applications from New World Systems (NWS). This effort includes the monitoring of an annual maintenance contract, day-to-day interface between users and NWS, implementation of PTFs (program fixes), and support of specific application downloads, queries and new report formats. This level of support requires the staff to be proficient in the use of AS/400 RPG IV and Object

Oriented programming skills to make the necessary changes to these mission critical programs.

**Applications** and **Network** are responsible for both the **Inside County Government (ICG)**, the development and deployment of web-enabled applications, and the publishing of over 6,000 web pages on the Internet through **WWW.CharlesCounty.Org**. Using three online Open Source Web Servers, Charles County has registered 8 URLs and has an annual rate of over 6,000,000 hits.

**Applications** is responsible for the acquisition and maintenance of GIS data and the promotion of the use of GIS Countywide. Tasked with the responsibility to implement the GIS Strategic Plan, the GIS Coordinator will coordinate the efforts of Charles County's Departments that can take advantage of the GIS data in support of their business processes. The GIS Coordinator serves on the Emergency Service's LEPC.

**Applications** provides additional support in the review of all Major Task Requests, validating the Work Flow diagrams and searching for Commercial Off-The-Shelf (COTS) Software that will meet the requirements of the requests and determine the cost. When a product is not available, but deemed necessary to the business process of a department, **Applications** submits an estimate on the amount of effort required to design, develop, test and implement the application in-house. Along with many of these in-house developed applications, the staff supports and maintains interfaces to vendors on-behalf of the users.

In addition to the in-house staff, IT uses information technology contractors, when appropriate. IT uses these contractors to obtain skills not possessed by the IT staff, to handle temporary peaks in workload, or to perform work in which outside expertise or objectivity is required. **Applications** staff have been able to learn a programming skill (Java suite) by having outside contracting for a web-enabled implementation. This experience helped **Applications** produce many award winning web-enabled applications

## Network

**Network** with a staff level of ten, has the responsibility for the Charles County's network Infrastructure called I-Net. This network consists of over 630 Desktop and Laptop Computers and 43 LAN Servers connected together through various topologies made up of T-1s, 350+miles of fiber-optic, Cat-5 cabling and 2.4 ghz wireless ethernet. **Network** responsibilities includes not only the establishment and operation of I-Net, but the continual maintenance of the infrastructure to assure a five nine reliability rating. With more than 350+ miles of cabling and fiber-optics plus hubs, routers, and switches located in over 100 strategic spots throughout the County, which connects multiple physical sites to one another for the purpose of interdepartmental and agencies processes and communications. **Network** manages the I-Net workload (demand upon the network servers), authentication login security and performs nightly, weekly and monthly backup on all servers.

**Network** is responsible for the deployment of the countywide Desktop standard software over the I-Net, access to the Internet through a firewall, receipt and distribution of all e-mail for County staff, virus scanning and detection, and Service Desk Support to over 600 County employees.

**Network** is also responsible for procurement, distribution, and maintenance of all information technology hardware which includes over 150 network connected printers and multi-function



printers (MFPs). **The Information Technology Use and Security policy** clearly defines that the acquisition of any information technology hardware and software must first be approved by IT and installed by IT personnel. This policy ensures consistency throughout the County, so that **Network** can deliver the effective and efficient support expected by the County staff.

IT's involvement with the College of Southern Maryland co-op program has made it possible for **Network** to install new replacement Desktop computers in a timely manner. The co-op students have been recruited from the local college and IT has been able to successfully hire PC Application Specialist that have graduated from this program.

## IT Service Commitments

Meeting the expectations of every county employee is one of the most challenging efforts IT faces. To provide the appropriate services to each and every employee who uses a Desktop or a Laptop Computer connected to the county wide I-Net Infrastructure, IT has developed the following service commitments:

1. All minor work requests will be assigned to one or more IT staff members within one (1) working day after final approval by the submitting department;
2. Work will be started or an estimated start date will be assigned within three (3) working days after it has been assigned;
3. If an estimated start date cannot be met, it will be reviewed with the user before changing;
4. IT will provide a fix for, or temporary replacement of, a downed Desktop Computer connected to County wide I-Net Infrastructure within 24 hours of notification;
5. IT will install all capital outlay equipment approved during the fiscal year it is budgeted; and
6. To the extent of IT's capabilities, IT will assure that Desktop Computers are no more than 5 years old.

Service commitments 1-3 will be fulfilled by all of IT. Commitments 4-6 will be fulfilled by **Network**.

### III. Strategies, Goals and Objectives

Over the years through effective strategic planning Information Technology has evolved into a substantial force in Charles County. Information Technology has become too important to be considered merely a support function. In fact Information Technology needs to be treated as a key component of Charles County, and requires these strategies, goals, and objectives showing how it can create measurable value for the County's Departments and their staff. The current team of IT professionals is dedicated to making Charles County number one among the citizens and in the State of Maryland. With the development and implementation of this IT Strategic Plan, Information Technology will indeed remain a first class organization that the County's Departments can depend on to make them better and more effective in service to our customer, the citizens of our county.

This IT Strategic Plan contains three major strategy categories:

- Workforce Support;
- Service to the Citizens and Businesses of Charles County; and
- Information Technology Management.

Each of these strategy categories are a priority in this plan. Each strategy category contains a goal or goals with objectives. There are six goals with 114 objectives to be worked on during the calendar year.

#### Workforce Support

**Strategy:** As its primary internally-focused information technology strategy, Charles County's IT will develop policies, systems and decision-making that enhance the capability of all Charles County employees to do their jobs well.

#### Goal #1: Information Technology Training

Information Technology will raise and maintain the information technology usage skill level of the County's employees.

#	Objective
101	Assist HR in procuring an instructor-led training program on the use of Microsoft Office 2007 Desktop software tools for department's employees who require them.
102	Continue to design, implement, and execute a long-range training and career development program for the IT staff.
103	Continue to provide a new County employee compulsory orientation to introduce them to the Desktop platform, the standardized Desktop software, the Use and Security Policy, and the proper use of VoIP telephony.
104	Identify Computer-based (CBT), Video-based (VBT) and Web-based (WBT) for training on the Microsoft Office 2007 Desktop software tools for department's employees.

#### Goal #2: Approved Information Technology Standardized Desktop Tools

Information Technology will improve and expand the approved information technology standardized Desktop tools and internal web-enabled applications.

#	Objective
201	Continue the annual 20% replacement program of computers county wide. This program requires the acquisition of new computers, configuring them with Network capabilities, and installing standard desktop software. Additional user specific hardware/software configuration is then performed. Depending on who is to receive the specific desktop, COTS software or developed in-house applications are properly installed and requisite hardware is added such as a local printer, a PDA interface, DVD writer, etc..
202	Improve common tools for e-mail, document sharing, calendaring, group collaboration and eFaxing where funding is available.
203	Maintain and promote an on-line interactive Service Desk FAQ using the ICG site.
204	Continue to create and implement web-enabled interfaces for selected data sources for the County's Integrated (green screen) Applications (NWS).
205	Expand use of GIS mapping to include layers of assets identified and managed by individual departments and related technologies (e.g. GPS) in accordance with the GIS Strategic Plan..
206	Continue implementation of Web-enabled applications making information available to outside agencies.
207	Procure, implement, and/or deploy Document Imaging Management Systems (DIMS) via a simplified imaging application work flow process for departmental use in permanent records keeping procedures and document processing where funding is appropriated.
208	Continue to implement and maintain/upgrade HR/Payroll web-enabled applications or COTS applications to support work management requirements as well as needs of the County's Human Resource Department and FAS' Payroll.
209	Continue to implement/maintain On-line Forms (Web enabled) with eventually digital signature when funding is available.
211	Automate manual processes or improve automated processes where feasible as identified in Work Flow diagrams submitted by County Departments.

#	Objective
211	Procure, implement, or upgrade Commercial Off the Shelf (COTS) software applications as required.
212	Continue deployment and support of the County's implementation of MS Office 2007 application suite. Assist with the implementation of the Microsoft Office Suite by developing new merge processes for all affected applications and processes.
213	Specification development for enhancements to the Work Request System. These enhancements will include capturing more information when the work request is entered to assist IT in handling requests in the most efficient manner possible. Archival processes will be developed through the use of XML and Java, and a Departmental Hours Analysis report will be implemented.
214	Continued support of NWS, Cartegraph, ArcView, BoardDocs, Firehouse, Expedition, AIM, Maximum Solutions and other vendor software packages and associated data. Plus apply new releases and upgrades to NWS, Cartegraph, ArcView, Firehouse, Expedition, AIM, Maximum Solutions and other vendor software packages and associated data.
215	Continue to provide support for data development efforts for E911 Mapping and GIS

### Goal #3: Network Infrastructure

Information Technology will implement, operate, maintain and enhance the information technology network infrastructure.

#	Objective
301	Continue to maintain and expand the 350+ miles of I-Net fiber-optics connectivity
302	Continue to maintain the integration of networkMD with I-NET.
303	Maintain the integration of the Public Safety 800 Mhz Radio System Micro-wave with the I-Net.
304	Maintain the Charles County 's telecommunications' responsibilities for 650 analog and VoIP telephony.
305	Continue to maintain and upgrade the existing County's Network management system.
306	Continue to maintain and improve remote access capabilities for County employees in the field, on travel, or at home through the deployment of Data cards and Cisco VPN.
307	Continue to improve access to centralized server supported capabilities (file access, application, database, CD-ROM).
308	Maintain employee's access to the Internet, ensuring speed and reliability for Internet connections.
309	Promote video conferencing capabilities, availability and use to all County Departments. Design and deploy written procedures for use of video conferencing.
310	Continue to enhance the wireless ethernet within County facilities connected by the I-Net.
311	Replace existing Utilities' MOSCAD SCADA servers with two HP Compaq Proliant DL3680s. Install servers with the Microsoft Windows 2003 Advanced Server Operating System. Configure servers for Clustered Fail-over capabilities. Specify, procure, configure and install an ISCSI SAN solution for MOSCAD data storage. Procure, configure, and schedule Veritas NetBackup client for daily data backups. Locate new servers in the I-Net MWWTP Equipment room. Coordinate the transition of existing radio telemetry equipment from old server site to new clustered Servers. Coordinate new version of terminal services software installation with vendor. Investigate the use of MOSCAD IP Gateway for better radio telemetry access.



#	Objective
312	Design, specify, procure, install, and test necessary video/audio/computer equipment to support new IT Training room/EOC backup facility at County Government building.
313	Design, specify, procure, install, and test necessary video/audio/computer equipment to support new Training/Conference room at Mattawoman Waste Water Treatment Plant.
314	Current and anticipated future use of the GroupWise DMS requires the roll-out of a dedicated DMS Post Office. IT will Implement a separate Post Office for housing DMS libraries. Improves the efficient document management design, provides scalability, fault tolerance, and maintenance is faster and more flexible.
315	Provide necessary assistance to County's Health Department to facilitate computer network transition from current Health Department annex location in White Plains, to old Hospital location in La Plata.
316	Support system infrastructure build-out for Vermont Systems Inc.'s RecTrac system. Need to supply necessary software/hardware infrastructure needed to replace existing Recreation Registration System with VSI's RecTrac. Proposed system roll-out is February 2009.
317	Design, procure, install, test and transition server data to a File Server Cluster System for the Dept of Emergency Services. This Hardware system configuration will provide an automated fail-over solution for the Department's File Server.
318	Continue to build out of Starter EVA 4400 system. This system currently consists of one tray of eight Fiber Channel 146Gb hot-swappable RAID 15K RPM hard drives with Smart Start Insight Management. The EVA 4400 Starter System is expandable to 96 Tera Bytes of on-line data storage. Collaborating with I-Net user group members to expand current base-line system for mutual shared storage space of 10 Tera Bytes of SAN storage.
319	Enhance current data backup operations. Upgrade current Digital Tape Archival system by adding an iSCSI capable LTO-4 tape library to our off-site storage location. This upgrade is required to ensure the data backup replication is performed to ensure disaster recovery.
320	Continue the O/S migration for remaining NetWare print/file servers to Novell's OES Linux. Of the 56 current Network Servers maintained by IT, 12 are Linux Servers, 23 are NetWare Servers and 12 are MS application Servers and 9 MS Virtual Servers.

#	Objective
321	Upgrade Servers in County Government Network. Integrate Utilities and Public Facilities Servers into central SAN Array configuration. Integrate DCS and Senior Center File and Print Servers.
322	Migrate web servers to Linux, which will provide us with the ability to incorporate new java technologies which are not available under Netware. A Linux testing server has been established. IT is currently developing a migration plan as each application must be modified, tested and moved independently.
323	Implementation of the IBM V6R1 operating system for the IBM System i5 Computer System.
324	Continue with the development, implementation and documentation of archiving procedures for NWS data. This will result in more efficient use of iSeries disk space.
325	Procure and install the PC Console feature for the IBM System i5 Computer System.
326	Organize and remodel the IBM System i5 Server area

## Service to the Citizens and Businesses of Charles County

**Strategy:** As its primary external information technology strategy, Information Technology will implement technologies that will significantly improve access to services from work, from home, and from the community. IT will work with all facets of the Charles County Community to provide equitable access to the County's information and services.

### Goal #4: Community Access

The Community will be able to access County's information and complete transactions with the Charles County electronically via the Internet . . e-Government.

#	Objective
401	Continue to implement and deploy e-commerce capabilities (e.g. Govolution's credit card payments) for County Services as identified.
402	Maintain and upgrade the capabilities for the community to exchange e-mail and files with any Charles County department electronically.
403	Maintain and improve telephony technologies serving the Department's business process where identified.
404	Continue exploration on technology to facilitate electronic access to all information and services from Charles County and Countywide agencies (e.g. Public Schools, Health Department, Voter Registration, Commuter Info....).
405	Continue to define, develop, and deploy Web-enabled applications to selected Charles County databases (e.g. Property assessments, taxes, owner account Utility Bills, road conditions) in accordance with applicable law and funding.
406	Upgrade Economic Development and Tourism's Web-site.
407	Implement interactive forms by assisting each department with procedures on how to create PDF forms to be interactive and work to develop the means to capture and track the data for each form. Bring updates to the PC Codebook be maintained in-house.
408	Develop list server capabilities where visitors would pull feeds and also register for Newsletters, Updates, Minutes, New Event postings etc.
409	Encourage department staff to maintain their Workgroup application data posting responsibilities in a timely manner (notices, publications & documents, regulations, project updates, minutes, broadcast schedules, etc.).

#	Objective
410	Investigating “Wiki Like” Web-site capabilities, allowing visitors to register, upload/download articles, and allow in-house staff to better manager their own content. This would provide our visitors with the capabilities to blog if the County chose to enable this feature.
411	Assist with the selection and implementation of a Constituent Response System, comprised of a Request Tracking module and a Knowledgebase module. Implementation of this system will enable the County to centralize and effectively manage citizen requests for services and information. A draft RFP has been developed and is being reviewed by the 311 committee.
412	Select and implement an Electronic Document and Records Management System (EDRMS). The EDRMS will provide electronic document storage, and eliminate much of the need for paper storage. It will also streamline business processes by implementing work flows which use electronic document images, rather than paper, throughout the process. Based on responses to our published EDRMS RFP, six (6) vendors are scheduled to demonstrate their solution in January and February 2009.
413	Implement New World Systems Public Administration 7.0.6 release. The release has been installed in a test environment and is currently being reviewed by the user community.
414	Work with Treasurer’s Office (TO) in the analysis, selection and implementation of an Online Tax Sale solution. Implementation of this solution would eliminate the need for a live tax auction thus reducing the time needed to complete the tax sale and finalize winning bids. Analysis and vendor meetings for this solution were conducted in 2008, however the TO made the final decision to stick with the live tax auction. A meeting with the TO, IT and a vendor is scheduled for January 2009.
415	Assist with the implementation of the Vermont Systems RecTrac software for Community Services. This software package is a replacement for their current Recware software as the Recware vendor no longer offers support for the current product.
416	Enhance CountySTAT to: Incorporate additional KPIs as needed; Provide a dashboard self maintenance feature; and Upgrade dashboard e-mail presentation
417	Implement eBud in a production environment. eBud is a web-enabled budget adjustment tracking application which automates the budget adjustment process. eBud has been installed in a test environment and is currently being reviewed by the user community.

#	Objective
418	Implement the Special Needs application in a production environment. The web-enabled Special Needs application centralizes the information related to individuals with special needs located throughout Charles County. The Special Needs application has been installed in a test environment and is currently being reviewed by the user community.
419	Modify Treasurer's Office Tax Software programs and files to accommodate the State Department of Assessment and Taxation's new file structures, scheduled for September 2009.
420	Enhance IVR Credit Card payment processing by developing processes to automatically transfer data from the Tax and Utility Billing modules to the network and then from the network to the Govolution FTP server. This will eliminate manual steps currently done by FAS – Accounting staff.
421	Work with EDD on possible enhancements to their Interactive Mapping website. These enhancements would incorporate demographic data and detailed reporting.
422	Implement the Mystery Stop application. The Mystery Stop application provides Community Services with the ability to maintain the mystery stops/dates and then post that information, along with the monthly Mystery Stop winners, to the VanGO website.
423	Implement the Scrolling Text Maintenance application. The Scrolling Text Maintenance application provides Community Services with the ability to maintain the scrolling message which appears throughout the VanGO pages on their site.
424	Implement the PGM Publications, Forms and Documents application, an internal web-enabled application which provides PGM with the ability to maintain and organize the information which they make available to the public via the Charles County Government website. The application has been developed; we are waiting on the go ahead from PGM to implement.
425	Develop and implement the Unity in Our Community Online Registration application, a web based application which provides the ability for attendees to register on-line for the Charles County Diversity Forum. Additionally provides the Public Relations Office with the ability to produce registration reports and registrant badges. Application is in final stages of development.

#	Objective
426	Develop and implement the <b>eNote</b> application, a web-enabled application which will provide citizens with the ability to sign up for e-mail notifications on various items of interest and will provide Community Services with a simple automated process for generating mass mailings. Development is underway.
427	Develop and implement the Projects and Contracts Reporting application. This application combines data from PGM's Expedition software with data from the New World System software, enabling the PGM and FAS departments to track the expenditures for contracts with regards to the amount budgeted for each project. Development is underway.
428	Develop and implement the Discharge Inspection and Notification application, a web-enabled application which will provide the Utilities and FAS departments with a means of managing the Wastewater Discharge permits and Septic Hauler permits through their various inspection and billing cycles. A specification document has been developed and is being reviewed by Utilities.
429	Develop and implement the Provider Skills application, a web-enabled application which will provide Emergency Services with the ability to maintain incidents and skill attempts made during these incidents. A specification document is under development.
430	Continue requirements collection for a web-enabled Tax Recalculation process and Supplemental Billing process. This development will remove existing errors in the current RPG process and provide an updated, state of the art user interface. This automation will eliminate weeks of work for the Treasurer's Office.
431	Requirements collection and specification development for a PGM requested Premise Address Process. This automated process will synchronize NWS GeoProperty accounts with current premise address information maintained in the Emergency Services 911 Addressing database system. Analysis of the business process has begun.



## Information Technology Management

**Strategy:** The information technology management strategy is to effectively maintain the current I-Net architecture and provide direction for future architecture enhancements. The implementation and enforcement of the Information Technology Usage Policy will support the effort to maintain the current architecture. This Information Technology Strategic Plan will support the effort to execute future architecture enhancements.

### Goal #5: County wide Information Technology Coordination

Effective practices and organizations will be in place for decision-making, execution, and evaluation on County wide issues and activities.

#	Objective
501	Improve dissemination of County's IT policies and standards.
502	Review the IT Review Process and Resource Allocation processes.
503	Improve and deploy measurement capabilities regarding IT's Key Performance Indicators.
504	Create a mechanism for an annual update of the IT Strategic Plan and accomplishments.
505	Conduct a review of the IT Strategic Plan on an annual basis.
506	Review and Upgrade the mechanisms for maintenance, replacement and upgrading of the County's Integrated Application System(New World Systems).
507	Perform the annual review and improvements to the IT security and the contingency and disaster recovery plan, policies and practices for the County's I-Net, servers, and the IBM System i5..
508	Improve recruitment, retention and development of the IT Staff in the area of network, standardized Desktop hardware and software support.
509	Work with County Security Officer to build-out IP camera surveillance system County wide.
510	Provide the necessary design and coordination to enable the delivery of discrete digital program delivery to governmental departments/agencies via the cable system.
511	Continue with the development and documentation of Application Development Standards.
512	Application of new releases and upgrades to all Applications area development tools; Macromedia, Eclipse, Java, NetBeans, etc.

#	Objective
513	Continued support, maintenance and enhancement of all in-house developed applications.
514	Continue to work with Charles County Departments to identify new processes which can be implemented or existing processes which can be enhanced.
515	With assistance from RIM implement the Development Studio for application development on Blackberrys.
516	Acquire remote management software for the Blackberry to enable easier support.
517	Enable the additional ISI reporting components for future access to phone service in the courthouse.
518	Upgrade the Countywide VoIP telephony Call Manager to the latest release.
519	Upgrade the Blackberry Enterprise Server (BES) to the latest release.
520	Complete comprehensive backup plan with CCBOE for IBM System i5 at North Point High School.

**Goal #6: Support of Charles County and Department Missions**

Consistent with County's network requirements, departments will be supported with capabilities, to decide, execute, and evaluate IT initiatives in support of their missions.

#	Objective
601	Enhance communication and consultation between Charles County Departments and IT personnel to ensure that their interests are represented and championed.
602	Establish the capability to identify existing and emerging IT opportunities for improving Charles County business processes and services.
603	Expand the capability to provide departments with IT consulting assistance based upon the detailing of departmental business procedures used to provide services.
604	Work with PGM in the analysis and selection of a new Permitting solution. Currently working on a recommendation document for the replacement of the software as the county has long outgrown the capabilities of the current permitting system.

#	Objective
605	Assist payroll with researching, evaluating, implementing and testing software applications which will provide employees with paperless direct deposit statements via the web.
606	Research the feasibility of barcoding Tax Bills to assist the revenue specialists when posting tax payments. As the volume of real estate properties in Charles County has increased, data entry errors and tax payment processing time have also increased. The use of barcoded tax bills will alleviate data entry errors and expedite the time involved to process a payment.
607	Research the feasibility of automating the election workers payroll. This was requested by the Accounting division.

## Guiding Principles

In implementing the goals and objectives under this IT Strategic Plan, Information Technology will adhere to the following principles:

- With the resources available, provide citizens, the business community, County wide agencies, Charles County Departments and their employees with timely, convenient access to appropriate information and services through the use of information technology;
- Business needs drive information technology solutions. Strategic partnerships will be established between the customer and Charles County so that the benefits of IT are leveraged to maximize the productivity of the Charles County Departments and improve customer services;
- Evaluate business processes for redesign opportunities before automating them. Use new technologies to make new business methods a reality. Exploit functional commonality across departmental boundaries;
- Manage information technology as an investment. Annually allocate funds sufficient to cover depreciation to replace systems and equipment before life-cycle end. Address project and infrastructure requirements through a multi-year planning and funding strategy. Limit resources dedicated to "legacy systems" -- hardware and software approaching the end of its useful life -- to absolutely essential or mandated changes. Designate systems as "legacy" and schedule their replacement. This approach will help focus investments toward the future rather than the present or past. Invest in education and training to ensure the technical staff in IT understand and can apply current and future technologies;
- Implement contemporary, but proven, technologies. Charles County will stay abreast of emerging trends through an ongoing program of information technology evaluation. New technologies will often be introduced through pilot projects where both the automation and its business benefits and costs can be evaluated prior to any full-scale adoption.
- Hardware and software will adhere to open (vendor-independent) standards and minimize proprietary solutions. This approach will promote flexibility, inter-operability, cost effectiveness, and mitigate the risk of dependence on individual vendors.
- Manage the Countywide Network (I-Net) as a fundamental building block of the Charles County's IT architecture. The I-Net will connect desktop computers, servers and the Charles County's Midrange Computer (**IBM System i5**); will provide both internal and external connectivity; will be flexible, expandable, and maintainable; be fully integrated using open standards and capable of providing for the free movement of data, graphics, images, video, and voice.
- Approach information technology undertakings as a partnership of IT and the Charles County's Departments providing for a combination of centralized and distributed implementation. Combine the responsibility and knowledge of IT, Charles County's employees, as well as outside contract support within a consistent framework of Charles County's IT standards. Establish strategic cooperative arrangements with public organizations to extend limited resources.
- Emphasize the purchase and integration of top quality, commercial-off-the-shelf

software (COTS) -- with minimal customization – to speed the delivery of new business applications. This may even require redesigning some existing work processes to be compatible with off-the-shelf software packages. Utilize modern efficient methods and laborsaving tools in a cooperative application development environment. A repository for common information objects (e.g., databases, files, records, methods, application inventories) will be created, shared and reused.

- Capture data once in order to avoid cost, duplication of effort and potential for error and share the data whenever possible. Establish and use common data and common databases to the fullest extent. A data administration function will be responsible for establishing and enforcing data policy, data sharing and access, data standardization, data quality, identification and consistent use of key corporate identifiers.
- The scale and pace of the plan execution will be subject to the availability of resources and budgeted funds.
- Strategic planning is an iterative process; this plan will be continuously updated to reflect new objectives. A new strategic plan will be published within the first quarter of each calendar year reflecting the updates along with the previous years accomplishments.

## **Appendix A**

# **IT Application Development Guidelines**



## Application Development Project Management Guidelines

### Purpose:

The purpose of this document is to detail the standard steps to be followed for the completion of a major IT Software Application project. An IT Software Application project is one which involves the acquisition, development or enhancement of application software for the requesting department. The goal is to assure that the result of the project will be a product of the highest quality which satisfies the in advance defined requirements, respects the constraints on both the user and Information Technology's workload and resources, and has been produced as efficiently as possible.

*"Planning is an unnatural process: it is much more fun to do something. And the nicest thing about not planning is that failure is a complete surprise rather than being preceded by a period of worry and depression"*  
-John Harvey-Jones

### Determination of Project Effort

To initiate an IT Software Application project, the requesting User Department enters a work request in the IT Work Request Tracking System. The request is assigned to a Systems Analyst who calls the requesting user to get a high level understanding of the request, priority and rough estimate of the level of effort. At this point, the analyst should be able to determine whether this is a major work request (greater than approximately 37 hours of work.).

Below is a sequential series of steps which should be followed for all major IT Software Application projects.

### IT Project Request Form

Based on the type of request, the analyst will forward the appropriate IT Project Request Form to the user. This may be either a Process Development Form or a System Modification Form.

**A Process Development Form** is used to collect information regarding a new process or system to be implemented. This could be a new system to replace a process which is currently done manually, or a new system to replace an existing older automated system which no longer meets the needs of the user. This could also be a new process to be incorporated into an existing system, for example; the incorporation of producing jury checks into the existing Accounts Payable system.

**A System Modification Form** is used to collect information regarding a change to an existing software application. This could entail the collection of new data, screen modifications, additional reporting needs, change in the way the data is processed, or a combination of any of the above.

The purpose of the either of the above IT Project Request Forms is for the requesting user to compile all of the information known about the project. This includes the scope and purpose of the project, benefits of the project implementation, time frame constraints, details as to how the process is currently being handled, specifics as to what the resulting software should do, examples of forms, work flow diagrams, flow charts, etc.

From this document, the analyst should be able to gain a solid understanding of what the user feels is needed from the new system/process.



Once the requesting user has completed the form, it should be returned, with any pertinent documentation, to the analyst. After the analyst has reviewed the form and all associated documents, the analyst and user department representative(s) will meet to discuss the project. This could entail multiple meetings.

### **System Requirements Document**

The System Requirements Document details the functionality that is required from the automated process. It should define exactly what the system needs to do, without going into the specific details of what is on each report or what is stored in each file.

Although IT is responsible for producing the System Requirements Document, the document is the result of the combined efforts of both IT and the requesting department. Both departments need to approve and sign off on the final document.

If the project is a request for a modification/enhancement to existing software, at the analyst's discretion, the development of a System Requirements Document may be not be necessary. For example, if a modification to an existing internally developed application is requested and, based on workload, it is predetermined that the modification will be done in-house, the analyst may decide to skip the System Requirements Document. However a System Requirements Document is always required when the request is for the development or acquisition of a new system.

### **Best Solution**

Once the System Requirements Document has been approved, the best solution for the project must be determined. Possible solutions include a Commercial Off the Shelf (COTS) software package or a custom developed solution.

### **Custom Developed Solution**

#### **System Specification Meetings**

The IT analyst will conduct a series of specification meetings with representatives from the requesting department. Through these meetings, the analyst will gather specific information regarding each system/modification requirement. The analyst will review copies of existing reports, existing forms (invoices, statements, letters, etc.) and any other information which will assist in the analysis.

The analyst will use the IT Project Request Form and the System Requirements Document as the guiding tools to work through the analysis of the system.

It is imperative that the requesting department has the proper representatives in these meetings. The people who know what the process currently does and the people who know what the process needs to do must attend these meetings.

At the conclusion of the specification meetings, the analyst will have gathered the information necessary to design a successful system/modification.

#### **Specification Document**

The Specification Document is the document which details the specifics of the system/modification(s). It outlines the data to be collected, including type and size, the reports to be generated, the system interfaces, screen layouts, data conversion and all automated processes.

The requesting department should carefully review the Specification Document to make sure that the system/modification(s) being designed will meet all of their requirements. Any changes or inconsistencies should be discussed with the IT analyst and resolved.

The final Specification Document will be signed off by both the requesting department and IT. This document will be the guiding tool used during the programming and testing phases.

Upon the approval of the Specification Document, IT will review its current outstanding commitments and should be able to provide the user department with an anticipated completion date.

### **Programming**

Once the Specification Document has been approved by both departments, the programming effort will begin. Programming can either be done in house by the Applications staff or outsourced to an outside vendor. Regardless of where programming is done, IT is responsible for ensuring that the specifications are being followed and the timetables are being met.

During the programming phase, the analyst may contact the user department with questions. In order to meet established time frames, the user department should be as responsive as possible in helping to resolve questions.

Any changes to the specifications which arise after the initial Specification Document is approved should be documented and signed off by both IT and user departments. Changes to the specifications will result in an adjustment to the estimated completion date.

Changes to the specifications must be within the initial scope of the project. Any requested changes which are not within the initial project scope may require an additional project to be initiated.

During the programming phase, the analyst will also develop any necessary software documentation, as well as any maintenance plans needed to sustain the system/modification.

### **Testing/Training**

Throughout and at the completion of the programming phase, the system/modification(s) is tested within IT. After being successfully tested by IT, the system/modification(s), and associated documentation, is turned over to the requesting department for their review. User training will be provided by IT. If necessary or feasible, the system/modification(s) will be placed in a test environment.

### **Implementation**

After being approved by the requesting department, the system/modification is moved to the live system. The project is closed out and IT's copies of the System Requirements Document, the System Specification Document, the System Documentation and any other supporting documentation are filed in a central location within IT.

### **Evaluation**

After the system/modification(s) has been in the production environment for a period of time, the analyst should meet with the user to evaluate the solution.

## **A Commercial Off-the-Shelf-Solution (COTS)**

A COTS solution results from the analyst and the user department working together to locate a software package that is the best fit for the project. In locating this package, the following items must be considered:

- (1) Does the solution satisfy the needs detailed in the System Requirements Document.
- (2) Does the solution fit within the available funding, taking into consideration the initial purchase cost and the annual maintenance fee.
- (3) Does the solution adhere to IT's Standards:
  - a) If a database is to be shared among multiple users, then the solution must be networkable. A networkable solution for CCG must run on a Novell server under current Netware version.
  - b) The solution must run under the county's standard desktop operating system, Windows XP.
  - c) The solution must either use a DB2 database or have its own integrated database. The solution cannot require a purchase of a special database to run.

As long as the COTS package adheres to IT's standards, the user department will make the final decision regarding the functionality of the software package. IT will not be held responsible if a software package is chosen which does not meet the processing needs of the user department.

IT will assist in the implementation of the COTS package in the following manner:

- (1) assist with the conversion of existing data to the new COTS, if necessary
- (2) provide the necessary space and equipment for the vendor's initial training session

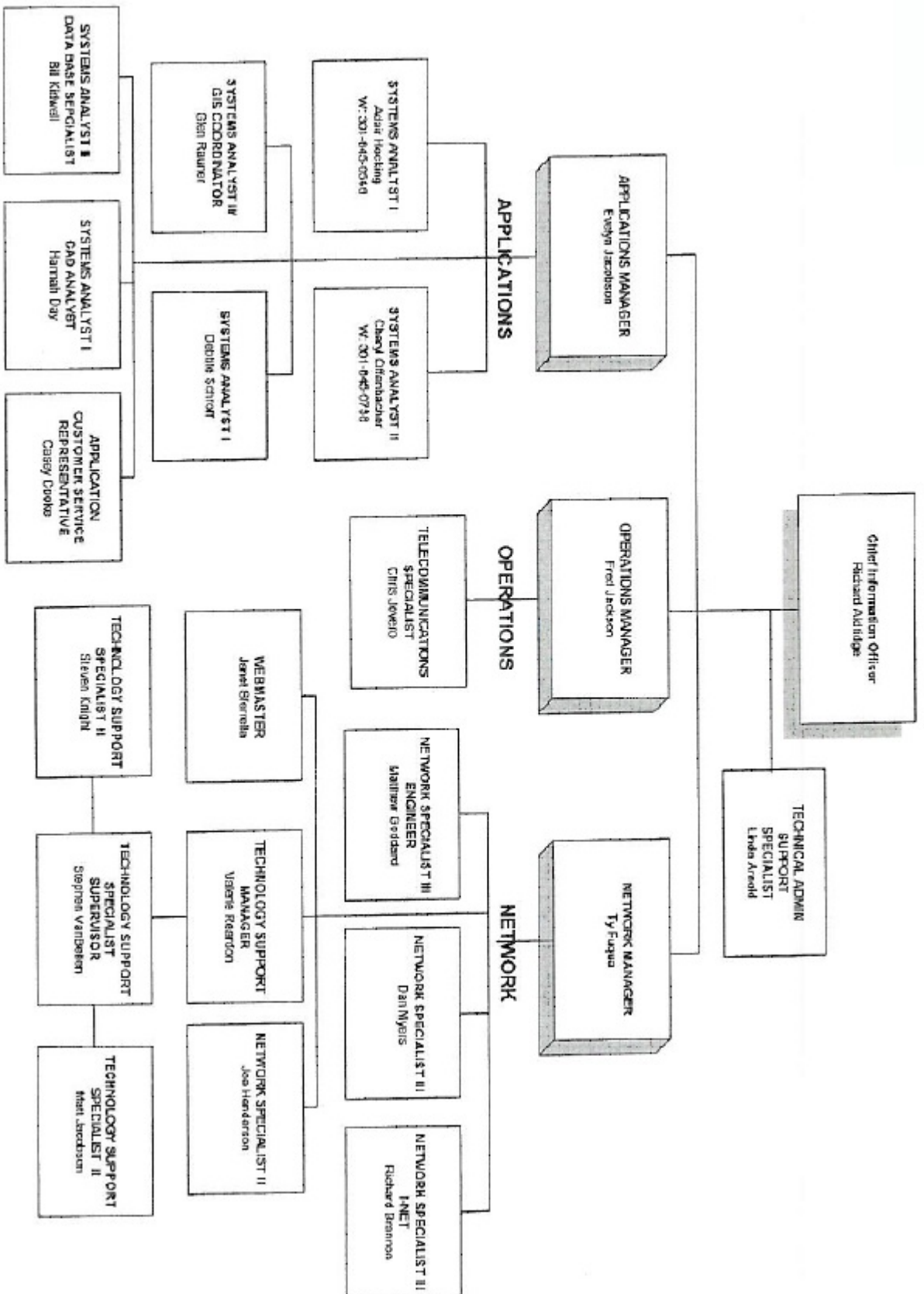
Once the system is operational, IT will be responsible for safeguarding the data and assisting in the application of any new software releases or upgrades. IT will not be responsible for learning the software, answering operational/procedural questions or resolving any software issues. It will be the user department's responsibility to contact the vendor directly for software support and any training needs.

## **Appendix B**

### **Organization Chart**



Dept of Fiscal & Administrative Services  
INFORMATION TECHNOLOGY



## **Appendix C**

### **Commissioners' Current Goals and Objectives**

## **Goal #1: Improve Economic Development**

Improve economic development to achieve a balance in commercial/industrial/residential growth as measured by the assessable, per capital income and average County wages (as measured against the metropolitan area) and other appropriate benchmarks through close coordination with the EDC through innovative business retention, expansion and location policies; promoting a favorable regulatory climate for business; and maintaining a thriving business climate and high quality of life where citizens can live, work, and prosper in Charles County.

### **Objectives:**

1. Aggressively pursue attracting defense and government related agencies and contractors.
2. Consider expanding tax credit incentives to the unincorporated areas for business investment or reinvestment by private sector.
3. Review incentives in effect, modifying as necessary, to enhance the County's competitiveness in marketing to businesses.
4. Promote and market the White Plains Business Park; evaluate site for future transit oriented design/light rail stop.
5. Continue support for land and tenet development of the Technology Center inclusive of DTC/UMD as anchor tenant.
6. Develop a tourism enhancement plan, focusing on the FERMATA Report implementation and target available waterfront property or development of a resort conference center.
7. Identify and examine opportunities to lease County land for the development of a campground and/or lodge facilities for tourism destinations.
8. Support NSWC through the I.H. Defense Alliance and the provision of necessary resources.
9. Investigate processing facility and infrastructure for alternate tobacco usage and assist farmers in transition to viable new enterprises to maintain agriculture in the County.
10. Prioritize certain waterfront properties for preservation and protection; public access; and/or development opportunities. Review implementation strategies per Waterfront Task Force Report.
11. Enter into an agreement with Mirant and the town of La Plata on the sale of reclaimed water.
12. Establish a Sister City Committee to evaluate relationships, seek sponsorships and determine benefits. Include the Jaycees, Board of Education and Department of Economic Development.
13. Seek funding from the Department of Business and Economic Development to complete a feasibility study based on the Friendship Landing Lodge concept.

## **Goal #2: Improve Infrastructure**

Improve County's infrastructure through funding an aggressive, yet affordable, CIP for those functions which are a government responsibility; increase the carrying capacity of the CIP through maintaining levies on new growth and constructing projects in-house where feasible; and facilitate wholly, or partially/private constructed and financed infrastructure, whenever advantageous.

**Objectives:**

1. Consider long-term stormwater management maintenance options and, in interim, work with communities for solutions where specific stormwater issues arise.
2. Explore feasibility of establishing a special taxing or assessment district for the more urban areas to fund and provide trash collection, litter control, hikers/biker paths, sidewalks, SWM, street cleaning and streetlights.
3. Continue to pursue hiker-biker trail opportunities.
4. Buy park property in Waldorf and Bryans Road.
5. Fund stadium in FY 07-11 budget and secure State construction funding in FY 08 budget.
6. Develop more detailed road and water and sewer infrastructure needs assessments for ETC/Maryland Airport area.
7. Continue to improve and expand transportation infrastructure by creating a Comprehensive Transportation System for Charles County to include a reliable and efficient commuter bus system, rail transportation in Charles County, and examined the feasibility of using trolley-type VANGO car (clean fuel or low emission vehicle) for certain routes.
8. Hire Water Resource Manager and develop a strategic plan to include: constructing new wells East; identify and evaluate alternative sources of water; promote use of reclaimed water; raise awareness of water value to public; promote water conservation; evaluate how proposed changes will effect water resources.
9. Enter into an agreement to purchase of water from WSSC.
10. Add new library to be built in Waldorf in fiscal 2009 Capital Improvements Budget and acquire site.
11. Evaluate hiring consultant/advocate to pursue Federal and State Transportation issues.
12. Develop in-house a feasibility study to evaluate the Smallwood Village and Old Waldorf School sites as venues for the arts.
13. Continue to fund Transportation projects in the Capital Improvement Program at the same percentage of the overall budget as past five years.
14. Establish Federal funding priorities to meet deadlines for Congressional grants; look at year marks for this year for guide complete and submit applications.

**Goal #3: Effectiveness and Efficiency of Government**

Improve the effectiveness and efficiency of government through utilization of productivity enhancing technology, equipment and incentives; and maintain a well-trained, highly motivated, fairly compensated, diverse workforce in a safe and orderly environment.

**Objectives:**

1. Begin establishing benchmarks and consistent ongoing tracking and reporting in all Charles County Government Departments.
2. Through better utilization of the recruitment process and tools, attempt to increase diversity at higher management levels.
3. Develop and implement a plan to professionally reviewed the processes and all County departments.
4. Examined responsibilities and missions of Commissioner appointed boards and committees to ascertain effectiveness of whether any are duplicated, unnecessary, or can be combined.
5. Develop other ways to convey to county employees are critical role they play in making government effective and efficient and the Commissioners' appreciation of it.
6. Conduct an all-day retreat with the Commissioners' Cabinet (i.e. County Administrator, Department Heads, County Attorney, etc.).
7. Acquire a facility to be used for providing multiple public services i.e.: family homeless shelter, recreation programs, senior programs, boys and girls club, etc; obtain Federal and/or State grants to fund; obtain an option to purchase; conduct a public hearing to seek input.
8. Provide additional youth oriented community centers and programs; scheduled briefing to County Commissioners on status of 2006 Report on Recreation.
9. Staff to prepare and submit to the County Commissioners for consideration a proposed incentive-based Green Building Code.
10. Analyze and provide recommendations to the County Commissioners on expediting building permits.
11. Investigate senior tax deferral programs to determine how many are applying and evaluate racing cap.
12. Improve Media Services proactive service to the County Commissioners established protocol and improve disseminating Commissioners' policies.
13. Explore an administrative abatement process to address violations of County Code accumulations of fines and creative "fast-track" process with Judge.

## **Goal #4: Comprehensive Planning**

Achieve prosperous, aesthetically pleasing County, with safe and healthy communities and a balanced economic base, where our heritage, rural character and legacy are also respected and protected through citizen involvement in the planning process, relevant land use plans and policies and conformance to smart growth principles to ensure a high quality of life

### **Objectives:**

1. Develop and implement as soon as possible a process whereby developers can communicate with adjoining property owners regarding new projects, solicit input, report to Planning Commission or staff, and acting good faith to address citizens concerns. Include options for posting of signs announcing meetings for better citizen involvement.
2. Ensure preservation of historic and rural heritage and character by identifying, obtaining, restoring and protecting existing properties and buildings of historic value and by finalizing Historic Preservation/Tax Credit Ordinance and implementing the Historic Preservation Plan and potential tourism.
3. Establish an Urban Design Task Force to research affordable housing, densities, minimum size of homes, height, etc.
4. Evaluate the effectiveness of the current Homeowner's Association Dispute Resolution Board.
5. Rural Housing Improvement Initiative - County Commissioners to appoint a committee to identify specific issues and develop a plan and goals to be addressed.
6. Review the minimum sizes of residential units allowed under the Zoning Ordinance to determine if they should be reduced and requirements for manufactured and mobile homes.
7. Review the role and responsibilities of the Housing Commission/Authority.

### **Goal #5: Support the Achievement of Education Benchmarks**

Through mutually cooperative and support deep relationship between the Board of Education and County Commissioners, provide the adequate financial resources and public facilities systems to achieve established benchmarks including school system academic achievements and personal responsibility goals, within a safe, orderly, and healthy environment for all students and personnel.

#### **Objectives:**

1. Develop and implement benchmarks for public education.
2. Work with the Board of Education to research/identify innovative methods of funding public education.
3. Evaluate year-round school calendar and double shift school days.

### **Goal #6: Maintain a High Level of Public Safety**

Maintain a high level of public safety and health in the county, as evidenced by declining stable violent crime rates, adequate response times, and security measures to dwarf or combat terrorism and bio-terrorism, by providing the necessary resources, emergency planning and support systems for law enforcement, fire/EMS, and public health functions respectively.

#### **Objectives:**

1. Reconvene and continue regular meetings of volunteer/career EMS and fire work group using SWOT protocol and achievements to address and resolve issues and improve the efficiencies. Examine the role of Board of Fire and Rescue; all reporting responsibilities including response times; certifications; resource scheduling; chain of command and unified command issues; and matters involving the County Medical Director.
2. Continue to develop and expand GIS capabilities and applications for emergency response, development, land use, planning and zoning, etc.
3. Review performance and financial benchmarks for Civista Hospital.

## **Appendix D**

### **2008 Accomplishments**



## Information Technology's 2008 Accomplishments

As the Chief Information Officer, I would like to thank all of my staff for their continued hard work and dedication. Without their commitment and excellence, past and future success would not be possible. Information Technology has also achieved zero turnover in staff for over 9 years.

Information Technology (IT) continues to have great years and the year 2008 was no exception.. For the sixth year in a row, IT has received "**The Nation's Most Digitally Advanced County**" award from The Center for Digital Government. The award has only existed for six years and the Charles County's IT is the only county to receive the 1<sup>st</sup> place in all six years.

The accomplishments summarized below met the target goals outline in the **2008 Strategic Plan**. The goals that were achieved were:

1. Raise and maintain the information technology usage skill level of the County's employees.
2. Improve and expand the approved information technology standardized Desktop tools.
3. Implement, operate, maintain and enhance the information technology network infrastructure.
4. Improve the capabilities for the Community to access County information and complete transactions with the Charles County Government via the Internet . . eGovernment.
5. Implement effective practices for decision-making, evaluation, and execution on County wide issues and activities in support of information technology.
6. Insure that each department will be supported with capabilities, to decide, execute, and evaluate information technology initiatives in support of their department missions.



The **Institutional-Network (I-Net)** continues to serve the public sector for Charles County and it could be said "very successfully." As mentioned many times before, the I-Net infrastructure, which was obtained through the Comcast Cable Franchise Agreement, includes over 350+ miles of fiber optics (both aerial and in-ground conduits), connecting directly to over 85 remote sites and indirectly to over 15 remote sites. All of these connections are used on a daily basis, with a ROI of savings in both money and time over the cost of using T1 lines. The Board of Education alone removed more than 40 T1s at a monthly rate of \$400+ each; this translates to an annual savings of more than \$192,000 per year from this time forward. The savings in time used to monitor these 40 T1s was tremendous. This does not take into account the other agencies T1s and in some cases even T3s and OC3s that were also removed. The Board of Education and Sheriff's Office have seen savings from day one and are receiving better transmission speeds from site to site. IT has successfully removed wireless connectivity to the Sheriff's Office and has deployed the fiber connectivity between the Sheriff's Office's Communications Center and the Emergency Management's Communications Center. In 2003, IT was recognized by the Center of Digital Government as the "Best of Breed" for a Wireless Initiative, a pilot in 2000 and deployed in 2002 during the Laplata Tornado. IT has parlayed that initiative to serve many remote sites like the Landfill, Dentsville VRS, and several of Department of Utilities pumping stations using the wireless technology and the tower microwaves which is called the Tower Data Network.



In addition to lighting (providing equipment and power to each remote location in order to have service) the fiber for the I-Net, IT continued throughout 2008 to assist in design, procurement, and implementation of the technology "digital" equipment for **Studio 95**. IT also assisted the Board of Education and the College of Southern Maryland in identifying and procuring **PEG equipment**. The benefits achieved by IT's involvement in the technology selection, procurement, and support was realized by all of the Commissioners meetings and many other board or committee meetings that are now able to be broadcasted "**Live on Studio 95 since 2006**". IT assisted in providing Caption equipment and software, then handling procurement of Caption services. Plus, the County's Website continues to provide **Caption** of all Commissioners' meetings for the public to view, **Worldwide**. IT's exceptional skills were realized by their direct involvement in **Live Broadcast of the "Swearing in Ceremony" in 2006** for the elected officials of Charles County from the **Northpoint High School Auditorium**. IT in 2008 planned, made arrangements for the correct equipment, procured

professional broadcasters, and deployed the broadcast in the new Commissioner's Meeting Room **through the I-Net to the Studio 95, for live broadcast on Channel 95 and simulcast on Channel 99.**



One of the major acquisitions of 2005 still remains to be a success factor in 2008 accomplishments. The acquisition and execution of the **NetworkMaryland's MOU** for connectivity to the Maryland State's Fiber Backbone continues to be the factor for public sector broadband solutions. This success alone saves an additional \$60,000 a year for not only the County but the Board of Education, CSM, and many other State Agencies. This MOU requires an ISP service with 3 redundant providers be provided by the State of Maryland, plus a 10 mbps (DS3) transmission capability, to the County's IT free of charge. It also provides immediate Internet services to everyone connected to through I-Net serviced by the County's IT. The County Libraries achieved better Internet access and eliminated their dial-up services. IT completed a planned deployment in 2006 to provide Internet Services to each of the twenty-four Fire/Rescue station which translated into a modest annual savings of \$8400 per station. This plan did require the deployment of WiFi to many of the stations not connected directly to the I-Net. Thus the indirect remote sites discussed in the I-Net deployment. IT calculated that the total savings for this type of service provided by IT via the I-Net connected to NetworkMaryland could be more than \$200,000 per year for the Charles County Government. **This acquisition is a major example of agencies collaboration for over 11 different agencies Countywide.**



Another major ongoing effort for 2008 involves the "**Document Imaging Management Solution**" (DIMS) as presented by the Chief Information Officer to the Commissioners. After determining a need for a document management solution, various vendors provided demonstrations. IT was given direction to develop a RFP in searched for a solution that provided a various set of procedures that would improve handling, efficiencies, and economic solutions with the on-going paper documents that the County Departments either "produces for" or "receives from" constituents. Using the 2006 survey results from each department where IT asked them to identify potential document imaging needs. The survey results identified over 50 diverse opportunities to apply a Document Imaging Management solution. **Paper Retention and Paper Reduction** processes were also considered. IT has identified 3 potential pilot projects and working to use this information IT was able to generate an Electronic Document Records Management System EDRMS RFP in August, 2008. With receipt of 13 proposals, IT selected 6 bidders to demo their recommended solution to a committee of representatives from the 3 potential pilot projects.



**The following are the Information Technology's 2008 accomplishments. The accomplishments' sequence has no bearing on the priority or importance of the project. The Bold Items in Parentheses identify the department/agency being served.**

1. IT designed, developed and implemented **CountySTAT, a web-enabled application** which tracks Charles County Government department specific Key Performance Indicators (KPIs). Also developed process to automatically e-mail KPI dashboards and an administrative portal to provide the CountySTAT Administrator with the ability to manage security, monitor access and distribute dashboards. Currently nineteen (19) KPIs are in production and three (3) are under development. **(County Administrator & Department Heads)**
2. In support of the CountySTAT initiative, IT designed, developed and implemented the following **web-enabled applications** to track departmental specific data:
  - **Senior Intake** application, providing CS - Aging with the ability to track the status of senior intake requests
  - **VanGO Log** application, providing CS - Transportation with the ability to arrival and departure times of VanGO vehicles
  - **SafetyLog** application, providing C-Wing with the ability to track employee injuries/accidents.
  - **Commissioners Correspondence Log** application, providing C-Wing with the ability to track the status of incoming Commissioner correspondence

- **Wastewater Violation Tracking** application, providing Utilities with the ability to track the number of violations at each facility
- **MBE Tracking** application, providing FAS – Procurement with the ability to track awarded contract and MBE participation amounts
- **Call Log** application, providing EDD with the ability to capture information about calls received, who handled each call and the amount of time it took to respond to each call

(County Administrator, DCS – VanGo, Senior Ctrs, Safety Officer, Utilities, FAS - Procurement, EDD)

3. **Replacement of Desktop PCs.** – Based upon the fiscal year budget, IT annually replaces the oldest Desktop PCs, based upon a 20% replacement policy of computers countywide. **No computer is more than 5 years old.** The published industry standard is 3 years and most of us are aware that because of the constant changes and improvements made to the hardware and software mix, private corporations usually replace every 2 years. This project required the acquisition of new computers that conform to the IT's PC Hardware Standard, then configuring them with network capabilities, installing standard desktop software, and depending on which staff member is to receive the specific desktop, installing IT's approved COTS (Commercial Off-The-Shelf) software(s) and/or in-house developed application(s). This year the Network staff fielded 103 new desktop computers and 14 new laptop computers, many of these units were part of FY09 annual replacement program. (Countywide).
4. **Microsoft Office 2007 Acquisition and Deployment** – IT procured off the State of Maryland Contract 513 Microsoft Office licenses for County wide deployment. Began staff training process for MS Office 2007 Word, Excel, and Power Point. Completed software integration testing with current software suite distribution set. Integrated MS Office 2007 in to NAL application suite for County Wide distribution. Plan total roll-out for January 2009. (Countywide)
5. In support of a **County 311 Non-Emergency** initiative, IT:
  - Served on and provided support to the 311 committee
  - Developed the draft Constituent Response System RFP
  - Installed, trained and implemented the Interspire Knowledge Manager software, a web enabled software application used to manage and publish, via the Charles County website, a searchable Countywide FAQ database.(Countywide)
6. In support of the implementation of a county-wide **Document Imaging Management Solution** effort to **manage and store documents electronically**, IT developed and published an Electronic Document Records Management System RFP. Of the thirteen (13) proposals received, six (6) finalists were selected and will demonstrate their solutions in January 2009. (Countywide)
7. IT contracted and worked with **Zekiah Industries (a Charles County MBE)** on the implementation of an **EDD Interactive Mapping** website. This website provides EDD with the ability to spatially display information regarding available commercial county properties. It provides potential county businesses with the ability to search for business locations within Charles County which meet their specific needs. Clicking on any given property will provide the visitor with the specific property information as well as a spatial display of surrounding business types. Implementation included the set up of ESRI's Internet Map Server (ArcIMS) and ESRI's Spatial Data Engine. (EDD)

8. IT designed, developed and implemented the **Watercooler, an internal web-enabled application** which provides Charles County employees with the opportunity to anonymously ask questions of the County Commissioners, and provides the Commissioners Wing with the ability to publish responses to those questions. **(Countywide)**
9. IT designed, developed and implemented the **Audit Log, an internal web-enabled application** which provides the Internal Auditor with the ability to compile audit information and track the implementation of audit recommendations. **(Internal Auditor)**
10. IT worked with **Govolution** in the development, testing and implementation of the **Interactive Voice Response (IVR) system** which provides Charles County citizens with the ability to make credit card payments for tax and utility bills via the phone. Developed a file of utility/tax account information and the process required to transmit the file to Govolution on a daily basis. Additionally, worked with Govolution in bringing their payment web site live. This replaced the Official Payment Corporation site and provided our citizens with the ability to use all types of credit cards for more types of payments. **(Countywide & Citizens of Charles County)**
11. IT researched different permitting solutions as possibilities for replacement of the **New World Systems Permitting Module**. Scheduled and attended demos of these solutions and began work on a recommendation document for the replacement of the software as the county has long outgrown the capabilities of the current permitting system. **(PGM – Permitting)**
12. IT designed, developed and implemented the **Signature Log, an internal web-enabled application** which provides the County Commissioners' Office with the ability to track the status and flow of documents which require the signature of the President of the County Commissioners. **(Commissioners)**
13. IT designed, developed and implemented the **EDD Business Database, a web-enabled application** which provides the Department of Economic Development with the ability to post and maintain local Charles County business information for viewing by visitors to the EDD site. **(EDD)**
14. In support of the County's move to Microsoft Office Suite, IT developed and implemented three internal web-based questionnaires (**OpenOffice Satisfaction Questionnaire, OpenOffice Training Questionnaire, MS Office Training Questionnaire**) targeting Charles County employees regarding their use of work processing, spreadsheet and slideshow software. These questionnaires provided the County with feedback and information directly from the employees in regard to their experiences and needs of office software. **(Countywide)**
15. In 2008, IT continued support of the County's implementation of **OpenOffice application suite**. IT took over HR's responsibility for OpenOffice training coordination efforts. Specified general as well as specific training course material as appropriate with outside training vendor(s). Conducted OpenOffice user satisfaction survey using on-line questionnaire. Determined specific user needs from that questionnaire survey. **(Countywide)**
16. IT continues to update the **"Web Site Content Management Plan"**, which incorporates guidelines on who, what, where, when, and how the **eCharlesCounty** Website and the **Inside County Government (ICG)** Website are continuously developed, maintained, and operated. **(Countywide)**  
**Note:** Using the "Web Site Content Management Plan" helps maintain a **Citizen-centric design**, allowing visitors to find information based on services vs departmentalization. This design is put together through a collaborative work effort with each department. It is a continuing work in progress and will continue to be updated. Each department's page is grafted into a new but consistent design look. Charles County Government's Website is currently comprised of 6,000+ pages.

The following summarizes the fifty-five (55) **2008 Website accomplishments:**

**Internet** (<http://www.charlescounty.org>)

- ✓Published updated county organizational chart
- ✓Created customized button to new Frequently Asked Questions online application

**Intranet** (<http://icg>)

- ✓Routinely create, update, revise, correct, and re-publish countywide letterhead, memo, and transmittal templates
- ✓Developed slide show presentation templates for County Administrator and Director of DFAS.
- ✓Routine updates and additions to front page employee picture rotation, upcoming events, water cooler, employee newsletter, etc.

**County Commissioners**

- ✓Revised Commissioners' bios
- ✓Updates to Diversity Forum Website's Community Sponsors information
- ✓Assisted Charles County Commission for Women with updates and revisions
- ✓Published Photo Gallery image
- ✓Established commemorative items pages/images

**Community Services**

- ✓Established Vango online routing in partnership with Google Maps (online trip planner)
- ✓Updated Vango stop pop-up images

**Board of Elections**

- ✓Prepare pages (images, links, etc.) for 2008 elections (Primary and General)
- ✓Update voter stats

**Economic Development & Tourism**

- ✓Updated Boat Launch Ramps and Marinas information
- ✓Establish and maintain 350<sup>th</sup> website
- ✓Establish and maintain thenationsbackyard.com website
- ✓Establish and maintain Entrepreneur of the Month site
- ✓Transfer ccbiz.org domain name to our web server
- ✓Publish major employer listing

**Emergency Services**

- ✓Added County Fire/Rescue Companies with images of logos
- ✓Updates to FARU Alarm Co List
- ✓Updates including staff and hour changes to Tri-County Animal Shelter pages
- ✓Update animal control regulations
- ✓Published Customer Survey pdf form

**Fiscal & Administrative Services**

- ✓Update approved Fees & Charges
- ✓Added county seal and contact information to online Bid Board pages
- ✓Updated online expense form with new mileage
- ✓Add Board of Directors information to HSP's pages
- ✓Updates to online payments page
- ✓Published 2007 CAFR
- ✓Established Grants web pages for both internal and external visitors
- ✓Publish FY 2009 Budget Information

**Human Resources**

- ✓Updates to Benefits information
- ✓Updates to employee personnel manual
- ✓Update hire packet
- ✓Published house keys 4 employees information

## Planning & Growth Management

- ✓Updated numerous revised, corrected and added new PGM Publications, Documents, and Applications
- ✓Updated Permits Administration Seminar Schedule
- ✓Established Hughesville Village Revitalization Plan pages
- ✓Western Pkwy - Access Table revisions
- ✓Forest Conservation Plan published
- ✓Updated Permit Guide
- ✓Published Comprehensive Plan Maps
- ✓2008 Dedication Document Seminar for web

## Public Facilities

- ✓Revisions to outdoor sports leagues
- ✓Updates to landfill tipping fees
- ✓Publish 2008 recycling schedule
- ✓Updates to Watershed Cleanup information
- ✓Change Solid Waste to Environmental Resources
- ✓Established Indian Head Rail Trail pages
- ✓Add 2008 Fishin' Buddies Photos to Parks Website

## Treasurer's Office

- ✓Update pages to include correct contact names/phone listings
- ✓Update verbiage on online payments page

## Utilities

- ✓Published Quality Control Reports

17. IT implemented the **Leave Tracking process** which provided the Payroll Office with the ability to maintain leave in the New World Systems Payroll module and to include employee leave balances on payroll checks. This became a ROI by eliminating the Countywide maintenance of Leave Spreadsheets by employees. **(DFAS – Payroll Office)**
18. IT modified the New World Systems pay period and utility billing processes to print paychecks, direct deposits, bills and notices on **Lasermate Pressure Seal Forms**. This is a major ROI because it eliminated the need for envelopes/envelope stuffing and resulted in a cost savings for the County. **(DFAS – Payroll Office, Utility Billing)**
19. In support of the Commissioners' meeting room relocation, IT modified the setup and configuration of **iMarkup** (the software used to annotate online content) to allow annotations to be ported between two computers. The vendor told us that this could not be accomplished but IT did it. This provides the ability for the Commissioners to annotate documents on their laptops and easily transfer those annotations to their desktops and vice versa. **(Commissioners)**
20. IT upgraded the **Online Bid Board, a web-enabled application**, to a Model View Controller format, bringing it up to current IT standards. Incorporated the ability for Purchasing to attach documents to RFPs/Invitations for Bids thus providing the ability for vendors to download associated necessary documentation via the web. Additionally incorporated an automated purge process for historical solicitations. **(DFAS – Purchasing)**
21. IT designed, developed and implemented the **RetireTrac, a web-enabled application**, which provides the Department of Human Resources with the ability to transmit employees' retirement data to Prudential on a biweekly basis. Retirement data is automatically extracted from the New World Systems Payroll module. **(DHR)**
22. IT designed, developed and implemented the **EMS Customer Satisfaction Survey, a web-enabled survey** which allows the Department of Emergency Services, EMS Division to capture feedback from the public on the quality

of care received during an EMS situation. **(DES – EMS)**

23. IT designed, developed and implemented the **Survey Tracking, a web-enabled application** which provides the Department of Community Services, Transportation Division with the ability to create and post VanGO Services surveys to capture public input. **(DCS – VanGo)**
24. IT designed, developed and implemented the **Online Childcare Survey, a web-enabled application** which provides the Department of Community Services with the ability to capture parental feedback regarding county childcare services. **(DCS)**
25. IT designed, developed and implemented (in a test environment) **eBud, a web-enabled budget adjustment tracking application** providing the Department of Fiscal Services, Budget Division with the ability to automate the budget adjustment process. The application allows all county departments to enter a budget adjustment via the web and allows the Budget Division to electronically track these adjustments throughout the appropriate approval stages. **(DFAS – Budget)**
26. IT designed, developed and implemented (in a test environment) the **Special Needs,, a web-enabled application** providing a central repository of information related to individuals with special needs located throughout Charles County. The Special Needs data will be accessible to Emergency Services, Community Services, Social Services and the Charles County Health Department. **(DES, DCS, Social Services, Health Department)**
27. In 2008, IT completed the build-out of **Countywide Video Conferencing System**. IT installed the necessary supporting infrastructure for the Video Conferencing equipment at various locations including Public Facilities, Community Services’ Port Tobacco conference room , Utilities’ Mattawoman Treatment Plant, Human Resources training room and EDD’s conference room. The system also included Video Conferencing capabilities for the following sites: Commissioner’s meeting room, County Administrators conference room, EMS conference room and PGM’s conference rooms. The Video Conferencing System solution leverages the County’s I-Net to provide high-speed video links between County locations. **All locations are capable of Video Conferencing worldwide using the Internet. (Countywide)**
28. IT procured, installed, and tested an **IP Camera Surveillance System for DCS** for their facility built in Port Tobacco. IT trained users on the 14 IP Camera surveillance system for Dept. of Community Services (DCS). Used for 24 hr/day entrance surveillance as well Day Care operations monitoring. IT provided system access to DCS personnel as well as County Government Security Officer. **(DCS, Security Officer)**
29. IT upgraded the **Video Surveillance Data Storage** for the County Treasurer This upgrade provided additional data storage capacity for an IP based video surveillance system. The increased data storage capacity allows for an increase in the sliding video storage window. IT Installed an additional 250 GB Toshiba disk subsystem and integrated this storage into the current IP video capture architecture. **(County Treasurer, Security Officer)**
30. IT analyzed, designed, procured, installed, tested and documented **a state-of-the-art Video Presentation System** for new County Commissioners’ meeting facility in County Government Building Auditorium. Worked closely with Public Facilities to fabricate necessary presentation infrastructure. Integrated ten different input sources into switching fabric to seamlessly display on three different video sources. Designed a video viewing solution for Dais workstations. Provided presentation system training sessions for various CCG staff members. **(Commissioners)**

31. IT upgrade Hardware for **DCS's Recreation Registration System** based upon attending several meetings with DCS staff and vendor (Vermont Systems Inc.) to discuss software/hardware infrastructure needed to replace existing Recreation Registration System with VSI's RecTrac. Provided system specifications and budget information for necessary infrastructure. Proposed system roll-out is scheduled for February 2009. (**DCS – Recreation**)
32. IT upgrade DES' **Emergency Operation Center's (EOC) Technology**. IT performed several upgrades to EOC including the following: Mounted 18 video/audio switching units to each EOC desk location to provide independent video/audio output to existing Projectors; Rearranged desk units and cabling; mounted two 40" flat panel T.V.s; upgraded audio system. (**DES**)
33. IT performed **I-Net Server Room Cooling Modification**. The current cooling solution would not scale to future computing plans. Coordinated with Public Facilities to plan/cost expansion solution of current Mitsubishi cooling units to lower ambient temperatures and develop seamless fail-over recovery after power loss. (**Countywide**)
34. IT updated the **Desktop Windows XP Operating System** by performing an in-place upgrade of all County Govt. Desktop PCs. Cumulative patches integrated into new version of standard desktop image to improve performance and correct legacy software issues. (**Countywide**)
35. IT altered the **Network Printer naming convention** policy. IT worked with Departmental staff to develop new names for many of the County's Network Printers. This change was made to enable end-users to better recognize Departmental printer locations and functions. (**Countywide**)
36. IT upgraded several **Servers in County Government Network** by consolidating multiple single use database application Servers into one robust single MySQL Server. IT also replaced primary system server (FS\_MIS) due to hardware failure. The old system was a HP 380/G2 and new system is a HP 360/G4. IT also upgraded **IntraNet Web Server Hardware**. (**Countywide**)
37. IT planned and scheduled Operating System migration for all remaining **NetWare print/file servers to Novell's OES Linux**. This required IT to develop a 3 year plan for Network Operating System cut-over. Because the current CCG Web Server will not support the latest Java version required for advanced Web application development IT created a Linux Web server with Java 6 and brought this Server on-line. Network the provided a system to Applications for Web application testing. Once Applications has completed testing, Network will put new Linux Web Server into production. (**Countywide**)
38. IT enhanced current **data backup operations** by adding a second SAN to Symantec's Linux based NetBackup Enterprise software solution. This upgrade doubled the current disk-to-disk data backup solution making the on-line disk storage capacity for the County now 4.8 Terabytes.
39. IT upgraded the current **Digital Tape Archival system** from an AIT5 architecture to a LTO-4 tape architecture which effectively doubled both the tape data capacity and data transfer rates. This was a necessary upgrade to ensure data backup window tracks with current/future data storage requirements.
40. IT began exploratory survey of I-Net user group members (composed of several County Agencies) to determine feasibility of a **Collaborative Storage Area Network (SAN) Disk Storage Solution** to provide scalable storage capacity for next five years. IT invited several SAN solution Vendors to County Government for system pre-sales presentations. It then invited several County Agencies to attend these meetings. IT conducted evaluation of available solutions and choose HP's EVA 4400 product line. IT procured and installed base-line starter system. The starter EVA 4400 system consists of one tray of eight Fiber Channel 146Gb hot-swappable RAID 15K RPM hard drives with Smart Start Insight Management. The EVA 4400 Starter System is expandable to 96 Tera Bytes of on-line data storage. A major ROI would be realized by collaborating with I-Net user group members to



expand IT's current base-line system for mutual shared storage space of 10 Tera Bytes of SAN storage.  
(Countywide)

41. IT upgraded the **County Government Internet Proxy System** by replacing the existing NetWare based BorderManager proxy system with a Microsoft 2003 platform running Sun's Java Web proxy system. This proxy upgrade was required to allow system transition of web site restriction software. The previous software used was Surf Control. The company that developed Surf Control was purchased by Websense, the industry leader in Web filtering software. The Websense Web Filter is required to control access to non work-related Web sites and applications during work hours. It also helps preserve bandwidth by protecting against intensive Web sites and applications such as streaming media
42. IT replaced the **SMTP Virus/Spam Filter** after evaluating the leading SMTP Virus/Spam Filtering systems, IT chose Symantec's Brightmail Message Filter. This system is bundled with Symantec's 8340 Virus/Spam filter appliance solution. Before selection was made, IT received an evaluation system to be tested. After a successful testing, IT put the system on-line and immediately gained improved system wide Spam effectiveness.
43. IT installed a **Virtual Server Solution**, by evaluating Virtual Server offerings and choosing the Virtual Iron product. Virtualization of server hardware consolidates servers, automates server cloning, provides high availability, allows for load balancing, eases server management, reduces server room cooling requirements, and saves energy. IT currently has nine Windows Server Platforms running concurrently on the Virtual Server System. The core hardware for the Virtual Server System consists of two HP DL 360/G5 with 32 Gigabit RAM, and an Intel QuadPort Gigabit Ethernet interface. These systems are clustered to an HP MSA 1000 providing 1.6 Tera Bytes of storage.
44. IT connected the **Capital Club House network to I-Net** by expanding the Comcast cable modem network portion of I-Net to Capital Club House. IT coordinated with Faison Property Management to gain right-of-way access for building cable entry. IT configured and tested Comcast broadband connection to the I-Net, then worked with Capital Club House Contractor's IT staff to provide full system access and develop necessary system changes for financial system access. **(DCS - Capital Club House)**
45. IT continues to maintain and update the **Charles County Government's Continuity Plans (COOP)** in 2008 by using an intern selected from the Commissioner's Annual College Intern Program. This effort involves reviewing each departments COOP and in agreement with the department/division updating where necessary. Final copy approved by County Administrator. **(Countywide)**
46. IT continues to support and provide **County Staff training on County Standard Desktop Software at the Open Lab** on Thursday Mornings, along with Bi-Annual Computer Fundamentals training. This is an on-going task that depends upon funding for upgrades and maintenance cost to equipment used in the lab. **(Countywide)**  
**Note:** In addition to the normal Open Lab training on Desktop applications, IT performed Twenty-six (26) New Employee orientations. These orientations provide assistance to what is available on the **Standard Desktop Software**, introduces the Use and Security Policy and use of the VoIP telephone.
47. IT acquired and installed over 1000 PTFs which permits the **IBM System i5** to maintain a reliability factor of the magnitude of 99.999%. IT also maintained efficiency of the i5 and its operations by documenting both manual and automated procedures that have been deployed. **Upgrade OS/400 to the IBM's current supported version of the operating system called i5/OS V5R4M0. (Countywide)**
48. IT has successfully installed, modified, and tested software to allow the **i-Series at North Point High School** to be used for Business Continuity by the county with the CCBOE collaboration. IT re-instituted **NET I/Q** to facilitate applications and allow for daily North Point processing. **(Countywide)**
49. IT continues to support of the **Commissioners' desires to have cross agency collaboration** The Chief Information Officer and staff members have been in communication with the IT organizations for CCSO, CSM,

Board of Education/Public Schools, Libraries, Health Department, DSS, and Civista Hospital. These meetings give opportunity for discussions on common vital topics and how to assist one another. **(Commissioners)**

50. IT continues to enhanced Phone Bill Tracking by procuring and installing **the ISI software** for monitoring and reporting on telephone usage. **(Countywide)**

51. IT continues to improve the handling of **Cell phones and services** by:

- Negotiated a rate of \$0.99 for **Sprint/Nextel phones** for a limited time;
- **Standardized cell plans** to provide the lowest monthly rates (Sprint & Verizon);
- Incorporating **Utilities cell phone** with rest of the County's cell phones, providing access to our special billing;
- Increased the number **Blackberrys by 35 and Data cards by 20**;
- Provided the commissioners and administrators with **test phones** (Sprint, Verizon, T-mobile, Nextel, and AT&T) at minimum cost to the county;
- Consolidated all **Sprint/Nextel Bills** into a single invoice;
- Provided international service to the commissioners for the German trip;
- Negotiated for free (\$130.00) phones for all 17 lines when the **PGM Roads Division** switched to VZW from Nextel; and
- Procured and managed the fifty (50) Pagers used in the **2008 Primary and General Election** on behalf of the Election Board.

**(Countywide)**

52. IT was very instrumental in resolving the new courthouse problems when damage occurred to the fiber infrastructure between the County Govt Building and the current Courthouse during construction. **(Circuit and District Court Personnel)**

53. IT analyzed and provided a plan for upgrading the telephone system in the current courthouse to accommodate users who will remain there and the temporary users who will be occupying the new courthouse structure. **(Circuit and District Court Personnel)**

54. IT negotiated \$100,000 in credits from Verizon with the assistance of a contractor called ProfitLine, receiving a 60% returned to the county. **(Countywide)**

55. IT continues to enhanced the VoIP Telephony and services by:

- Aided the **CCSO** in continuing their move to IP phones;
- initiated unified meetings with **Verizon and CCSO** to resolve common problems; and
- successfully patched the **BES (Blackberry Enterprise Server)** and fixed Daylight Savings time

**(Countywide & CCSO)**

56. IT provided **updated Performance Measurements (PMs)** to the annual budget process. The PMs provided are found in the approved budget for FY10. **(IT)**

57. IT continues to assist the **Charles County Library personnel to submit direct deposit information to the bank**. The Charles County Library director requested assistance establishing a secure method for transferring payroll data to Mercantile bank since their security had been breached and fraudulent direct deposits paid to unauthorized personnel. **(Charles County Libraries)**

58. IT implemented **InspecTran** Phase 2 which is the phase that provides PGM with the ability to automatically update the New World Systems Permitting files with inspection data which the contractor has uploaded to the

county FTP site. As a result of the implementation of this phase, the contractor can now download permit and inspection data from the county website, perform the inspections and then upload the results of the inspections back to the county. This eliminates the need for Permitting personnel to manually enter the inspection data and also provides the public with the ability to view the inspection data via the Charles County website. **(PGM)**

59. IT designed and developed the PGM **Publications, Forms and Documents, an internal web-enabled application** which provides PGM with the ability to maintain and organize the information which they make available to the public via the Charles County Government website. **(PGM)**
60. IT modified the **New World Systems Permitting** programs to provide more flexibility in the fees which can be attached to a permit. The standard system required all established permit-related fees to be attached to a permit; modifications now require only active fees to be attached, freeing up the space for permitting staff to add additional fees as needed. **(PGM)**
61. IT enhanced the **Shift Notes** application by:
  - Designing, developing and implementing the **Communications Shift Notes** process. This process provides Communications supervisors with the ability to complete their supervisor shift notes form via the web and automatically submit the form to the assistant chief via e-mail; and
  - Analyzing and designing the **Daily Apparatus Check-Off Sheet** process. This process will provide EMS personnel with the ability to complete this check-off sheet via the web and then automatically submit it to the assistant chief via e-mail.**(DES –EMS)**
62. IT enhanced the **Recycling application** to allow the Contractor to enter informational notes into the system. This allows Public Facilities staff to be notified of issues that affect entire routes versus requests or problems from individual citizens. **(PF - Recycling)**
63. IT enhanced the **Employee Exchange** application to provide the ability for employees to upload pictures of the items they are advertising. **(Countywide)**
64. IT enhanced **eCalendar** to provide the ability for Tourism to track their top seven (7) events and then feature those events on the Tourism website. **(EDD - Tourism)**
65. IT upgraded the **Captioning** application to a Model View Controller format, bringing it up to current IT standards. Incorporated additional security features, reporting and a revised business flow process. **(Commissioners)**
66. IT developed the procedures and processes necessary to display **Stray Animals** pictures on the Charles County web site. These pictures display directly and automatically from the Multiple Options Animal Shelter Management System and require no manual intervention by Charles County personnel. **(DES - Animal Control)**
67. IT developed and implemented the websites and provided support for reporting the results of the **2008 Primary and General Elections**. **(Board of Election)**
68. IT analyzed and designed the **Discharge Inspection and Notification, a web-enabled application** which will provide the Utilities and FAS departments with a means of managing the Wastewater Discharge Permits and Septic Hauler permits through their various inspection and billing cycles. **(Utilities & DFAS - Utility Billing)**

69. IT analyzed and designed the **eNote, a web-enabled application** which will provide citizens with the ability to sign up for e-mail notifications on various items of interest and will provide Community Services with a simple automated process for generating mass mailings. **(DCS)**
70. IT analyzed and designed the **Projects and Contracts Reporting** application. By combining contract and invoice amounts in PGM's Expedition software with budget and expense amounts from the New World System software, this web-enabled application will enable the PGM and FAS departments to track the expenditures for contracts with regards to the amount budgeted for each project. This allows both departments to accurately determine whether invoices for the projects should be paid. **(PGM & DFAS)**
71. IT analyzed, designed and developed the **Mystery Stop, a web-enabled application** which provides Community Services personnel with the ability to maintain the mystery stops/dates and then post that information, along with the monthly Mystery Stop winners, to the VanGO website. **(DCS - VanGo)**
72. IT analyzed, designed and developed the **Scrolling Text Maintenance, a web-enabled application** which provides Community Services with the ability to maintain the scrolling message which appears throughout the VanGO pages on their site. This application eliminates the need for Community Services staff to contact IT whenever a change to the wording is required. **(DCS - VanGo)**
73. IT analyzed and designed the **Unity in Our Community Online Registration, a web based application** which provides the ability for attendees to register on-line for the Charles County Diversity Forum. Additionally provides the Public Relations Office with the ability to produce registration reports and registrant badges.
74. Ongoing development of **Application Development Standards and Tools**. IT continues to focus on standardizing the programming/ development efforts and eliminating the need for excessive coding, while taking advantage of advances in technology. Some highlights of 2008 were:
- Implemented the **reCAPTCHA** program for all public online form submissions. The reCAPTCHA program is used to prevent automated processes from submitting forms via the web. Before posting an entry on our website, visitors are required to correctly identify words distorted within images; these words are not able to be read by optical character recognition software programs. This has greatly reduced the amount of spam received through our automated forms.
  - Enhanced the **java connection process** to incorporate communication with Sybase databases. This allows internal development of web processes which communicate with any Charles County Sybase databases; for example, Expedition database.
- (Countywide)**
75. IT continues the support of New World Systems software. This includes routine maintenance (e.g., table updates, security), user questions, software errors, user errors, assistance in annual tasks (e.g., full year tax billing, tax sale, mass payment processing, preparing the annual trial balance for auditors, W2s, 1099s, etc.) and coordinating the receipt and installation of NWS passthru. Major effort is also expended in the maintenance and development of custom modifications to the standard applications. **(Countywide)**
76. IT upgraded New World Systems' **Utility Billing** software to Version 5.25. **(DFAS - Utility Billing)**

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77. IT continues **support of GIS' ArcView products by:**
- providing assistance in developing data sets for spatial viewing;
  - providing assistance in developing, printing and exporting maps;
  - consulting on use of the software to address business processes;
  - troubleshooting users' problems and questions; and
  - providing personalized instruction and training on software functionality.
- (Countywide)**
78. IT installed the **2007 6" orthophotos** for use by the GIS community. **(Countywide)**
79. IT continues the **support of vendor supplied software**. This includes routine maintenance, user questions, software errors, user errors, data transfers to/from and installation of upgrades and PTFs. **(Countywide)**
80. IT continues the **support and enhancement of in-house developed applications (Countywide)**.
81. IT continues the support, maintenance, and updates of the **County's GIS data** throughout 2008, providing assistance in creation of new layers and data sources as needed. **(Countywide)**
82. The **IT's GIS Coordinator** continues to serve as a member of the Maryland State Geographical Information Committee (MSGIC), the Local Emergency Planning Committee (LEPC), the Baltimore Area ArcView Users Group and the Maryland Property View Users Group. **(Countywide)**
83. The IT's GIS Coordinator continues to provide for **Countywide distribution of GIS solutions**. IT continues support, maintenance, and updates of the **County's GIS data** throughout the year, providing assistance in creation of new layers and data sources as needed. IT continues **support of all ArcView products** including troubleshooting users' problems and questions, providing personalized instruction and training on software functionality, providing assistance in developing, printing and exporting maps, consulting on use of the software to address business processes. **(Countywide)**
84. IT Provided **County GIS data** to the following organizations during 2008:
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- A. MORTON THOMAS and Associates, Inc. (AMT)
  - AMEC Earth & Environmental, Inc
  - Ben Dyer Associates, Inc.
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- Booth & Associates
  - Bowman Consulting Group, LTD
  - Clark Nexsen
  - Coastal Resources, Inc.
  - Environmental Resources Management (ERM)
  - Environmental Systems Analysis, Inc.
  - Freedom of Information Acts requests from citizens
  - Jacobs
  - KCI Technologies, Inc.
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- Lorenzi, Dodds & Gunnill, Inc.
  - Maryland Department of Transportation Maryland Transit Administration (MTA)
  - Patton Harris Rust & Associates
  - Parson Brinkerhoff
  - Thomas Stone National Historic Site (National Park Service)
  - United States Geological Survey (USGS)
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- Washington Council of Governments
  - Whitman, Requardt & Associates, LLP
  - Whitney, Bailey, Cox and Magnani, LLC
  - Zekiah Technologies, Inc.

**These organizations were either doing consulting work for Charles County on county projects or were working on either state or federal projects and made a request to the county for the information. County projects would include, but are not limited to, infrastructure improvements to roads, water/sewer lines, and environmental improvements.**

85. The Chief Information Officer serves on the Tri County Council for So Md investigating Rural Broadband Issues, serves as President of the **Local Government Information Group (LGIS)**, serves as a member of the **Board of Directors for NetworkMaryland** as the **Local Government (MACo) Representative**, serves as a current Director on the Board and the Past President of the **Charles County Technology Council**, served as a member of the **Board of Directors (The 2003 & 2004 Campaign Chairman) for United Way of Charles County**, serves as a member of the **LaPlata and Waldorf Kiwanis**, served as the technical member of the **Phase II Implementation Team for T/S Voting Machines – State Board of Elections**, and continues to serves each year as a member of the **Board of Advisor for the Maryland State CIO Summit** where he has also been a speaker on **Open Source Solutions for Governments** (Government Computer News (GCN) magazine sponsors this annual event), the opening keynote speaker at the **New World Systems’ 2007 Executive Conference** in Baltimore, MD and a topic speaker on “Profession Development Training” at the **Marcus Evans’ GovNet Summit for CIOs** in Warm Springs, VA. .
86. In 2008, the Chief Information Officer presented to MACo’s County Administrators and Attorneys’ Winter Conference on the subject of **FIOA email requests. (Charles County)**
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